Amendments to the Claims:

Please replace the claims with the following amended list, showing changes made.

1. (Currently Amended) A rechargeable cooling device, comprising:

a first reservoir configured to contain a liquid;

a second reservoir configured to contain a vapor of [[said]] the liquid;

a heat exchanger connected to at least one of [[said]] the first and second reservoirs; and

a reusable valve,

wherein [[said]] the first reservoir is in fluid connection with [[said]] the second reservoir via [[said]] the reusable valve, [[and]]

wherein the cooling device is configured so that:

(a) when [[said]] the first reservoir contains [[said]] the liquid at a first pressure and [[said]] the second reservoir contains [[said]] the vapor at a second pressure lower than [[said]] the first pressure, [[said]] the heat exchanger may be made to absorb heat at least in part by opening [[said]] the reusable valve and allowing [[said]] the liquid to vaporize as [[said]] the first and second pressures equalize; and

(b) when pressures in [[said]] the first and second reservoirs are approximately equal at a first temperature, and after [[said]] the heat exchanger has been made to absorb heat, [[said]] the cooling device may be recharged for a subsequent use at least in part by cooling at least a portion of the [[said]] cooling device to a second temperature lower than [[said]] the first temperature,

wherein the cooling device further comprises the liquid, and

wherein the liquid comprises a refrigerant having a vapor pressure at room temperature greater than approximately 1 atm.

2. (Canceled)

3. (Currently Amended) The rechargeable cooling device as in claim [[2]] 1, comprising said liquid in a quantity such that, when said valve is open and pressures in

said first and second reservoirs are approximately equal at said first temperature, said liquid is substantially entirely vaporized, wherein said first temperature is in the range of approximately 70° to 100°F.

4. (Original) The rechargeable cooling device as in claim 1, further comprising a third reservoir connected to said heat exchanger and configured to hold a substance desired to be cooled, wherein said rechargeable cooling device is an insulated mug, and wherein said third reservoir is shaped to contain no more than about 16 fluid ounces of a beverage.

5. (Original) The rechargeable cooling device as in claim 1, further comprising a third reservoir connected to said heat exchanger and configured to hold a substance desired to be cooled, wherein said rechargeable cooling device is an insulated cooler having a storage volume in excess of one cubic foot, and wherein said third reservoir is said storage volume.

6. (Original) The rechargeable cooling device as in claim 1, further comprising a third reservoir connected to said heat exchanger and configured to hold a substance desired to be cooled, wherein said rechargeable cooling device is an insulated cooler having a storage volume in excess of one cubic foot, and wherein said third reservoir is a cooling volume of said storage volume having a volume not more than about 48 fluid ounces.

7. (Original) The rechargeable cooling device as in claim 6, wherein said cooling volume is shaped to hold and cool at least one and not more than four 12-ounce beverage cans.

8. (Currently Amended) [[The]] A rechargeable cooling device ~~as in claim 1~~, comprising:

a first reservoir configured to contain a liquid;

a second reservoir configured to contain a vapor of the liquid;

a heat exchanger connected to at least one of the first and second reservoirs; and

a reusable valve,

wherein the first reservoir is in fluid connection with the second reservoir via the reusable valve,

wherein the cooling device is configured so that:

(a) when the first reservoir contains the liquid at a first pressure and the second reservoir contains the vapor at a second pressure lower than the first pressure, the heat exchanger may be made to absorb heat at least in part by opening the reusable valve and allowing the liquid to vaporize as the first and second pressures equalize; and

(b) when pressures in the first and second reservoirs are approximately equal and after the heat exchanger has been made to absorb heat, the cooling device may be recharged for a subsequent use, and

wherein [[said]] the second reservoir comprises a funnel configured so that while [[said]] the cooling device is being ~~cooled to said second temperature~~ recharged, liquid condensed from [[said]] the vapor in [[said]] the second reservoir falls down [[said]] the funnel into [[said]] the first reservoir.

9. (Original) The rechargeable cooling device as in claim 8, wherein said valve comprises a valving portion configured to mate with a bottom of said funnel, and wherein said valve may be opened by moving said valving portion downward and closed by moving said valving portion upward.

10. (Original) The rechargeable cooling device as in claim 8, wherein said valve comprises a valving portion configured to mate with a bottom of said funnel, and wherein said valve may be opened by moving said valving portion upward and closed by moving said valving portion downward.

11. (Currently Amended) The rechargeable cooling device as in claim [[10]] 1, wherein said valve is pressure regulating so as to prevent said first pressure from exceeding a predetermined maximum pressure.

12. (Currently Amended) [[The]] A rechargeable cooling device ~~as in claim 1~~, comprising:

a first reservoir configured to contain a liquid;

a second reservoir configured to contain a vapor of the liquid;

a heat exchanger connected to at least one of the first and second reservoirs; and

a reusable valve,

wherein the first reservoir is in fluid connection with the second reservoir via the reusable valve,

wherein the cooling device is configured so that:

(a) when the first reservoir contains the liquid at a first pressure and the second reservoir contains the vapor at a second pressure lower than the first pressure, the heat exchanger may be made to absorb heat at least in part by opening the reusable valve and allowing the liquid to vaporize as the first and second pressures equalize; and

(b) when pressures in the first and second reservoirs are approximately equal at a first temperature, and after the heat exchanger has been made to absorb heat, the cooling device may be recharged for a subsequent use at least in part by cooling at least a portion of the cooling device to a second temperature lower than the first temperature, and

wherein the cooling device further ~~comprising~~ comprises a refrigerator comprising a second heat exchanger connected to at least one of [[said]] the first and second reservoirs, [[said]] the refrigerator configured to cool and condense [[said]] the vapor during recharging of [[said]] the cooling device.

13. (Original) The rechargeable cooling device as in claim 12, wherein said refrigerator is removably connected to said cooling device.

14. (Original) The rechargeable cooling device as in claim 1, wherein said valve is adjustable so that a flow rate of vapor passing through said valve may be adjusted.

15. (Original) The rechargeable cooling device as in claim 1, further comprising a pressure relief valve connected to at least one of said first and second reservoirs.

16. (Original) The rechargeable cooling device as in claim 1, wherein said second reservoir has a volume at least ten times greater than a volume of said first reservoir.

17. (Original) The rechargeable cooling device as in claim 1, wherein said second reservoir further comprises an absorbent material chosen to absorb said vapor.

18. (Currently Amended) A method for cooling a substance, comprising:

providing [[a]] the rechargeable cooling device as claimed in claim 1~~, comprising: a first reservoir configured to contain a liquid; a second reservoir configured to contain a vapor of said liquid; a heat exchanger connected to at least one of said first and second reservoirs; and a reusable valve, wherein said first reservoir is in fluid connection with said second reservoir via said reusable valve~~;

placing [[said]] the substance in thermal contact with [[said]] the heat exchanger;

opening [[said]] the reusable valve when [[said]] the first reservoir contains [[said]] the liquid at a first pressure and [[said]] the second reservoir contains [[said]] the vapor at a second pressure lower than [[said]] the first pressure;

allowing [[said]] the liquid to vaporize and [[said]] the heat exchanger to absorb heat from [[said]] the substance; and

recharging [[said]] the cooling device by:

cooling [[said]] the vapor to condense [[said]] the vapor into [[said]] the liquid;

containing substantially all of [[said]] the condensed liquid in [[said]] the first reservoir by, if necessary, transferring [[said]] the condensed liquid to [[said]] the first reservoir; and

closing [[said]] the reusable valve.

19. (Original) A method as in claim 18, further comprising providing a third reservoir connected to said heat exchanger, and placing said substance in said third reservoir.

20. (Canceled)

21. (New) A method of advertising a rechargeable cooling device, comprising:

indicating that the rechargeable cooling device as claimed in claim 1 is available for purchase;

indicating that the cooling device is capable of cooling at least one of foods and beverages without an external source of power;

indicating that the cooling device may be recharged for a subsequent use; and

indicating that the cooling device is capable of the cooling on demand, after the cooling device has been recharged.

22. (New) The rechargeable cooling device as in claim 12, wherein the second reservoir further comprises an absorbent material chosen to absorb the vapor.